

REMARKS

Status of the claims

With the above amendments, claims 15, 20, 27, and 39 have been amended, claims 29-31 have been canceled, and claims 40-45 have been added. Accordingly, claims 15, 16, 20-23, 25, 27, 28, 32-34, and 38-45 are pending and ready for further action on the merits. No new matter has been added by way of the above amendments. Support for new claims 40-41 can be found specifically at paragraphs [0035], [0037], and [0038] as well as elsewhere throughout the detailed description and original claims. Support for new claim 42 can be found in paragraphs [0070]-[0082] and Figures 8-17 as well as elsewhere throughout the detailed description and original claims. Support for new claim 43-45 can be found specifically at paragraphs [0037] to [0039] as well as elsewhere through the detailed description and original claims. The new claims are within the scope of the restriction requirement as the claims are directed to a method including the step of removing the first element from the assembly. Reconsideration is respectfully requested in light of the following remarks.

Interview Summary

Applicants' representatives would like to thank the Examiner for holding telephonic interviews on May 7, 2007 and June 5, 2007. The Examiner's comments were helpful and appreciated. No agreement was reached in either interview. The cited art, the asserted rejections, and the drawings were discussed.

Objection to Drawings

The Examiner objects to the drawings under 37 CFR 1.83(a). The Examiner views that the drawings do not show every feature of the invention specified in the claims. Applicants

respectfully disagree. Applicants respectfully assert that the drawings in view of the specification show every feature of the invention as specified in the claims.

The Examiner states:

...the limitations of the claims 15, 38, and 39: 'heating a first element comprising an initial dimension to a first dimension, the first dimension greater than the initial dimension; and removing the first element from the assembly' must be shown or the feature(s) canceled from the claim(s).¹

Applicants respectfully direct the Examiner's attention to figures and specification as a whole, but specifically Figure 2, heat source 118; Figure 10, heat source 318; and Figure 15, heat source 418 in view of paragraphs [0037]-[0038], [0052]-[0053], [0072]-[0073], and [0078]-[0079]. The heat source in the figures heat the first element to a first dimension that is greater than an initial dimension of the first element. The first element may be coupled with a second element to form an assembly when the first element comprises a first dimension. Similarly, the first element may be removed from the assembly when the first element comprises a first dimension.²

Accordingly, the drawings show every feature of the invention specified in the claims.

Applicants respectfully assert that the objection to the drawings be withdrawn.

35 U.S.C. § 112, Second Paragraph and Claims 15, 16, 20-23, 25, 27-34, 38 and 39

The Examiner has rejected claims 15, 16, 20-23, 25, 27-34, 38, and 39 under 35 U.S.C. § 112, second paragraph as allegedly being indefinite for failing to point out and distinctly claim the subject matter which applicant regards as the invention. Applicants traverse.

¹ Office Action dated February 7, 2007, page 2, ¶ 1.

² For example, see Figure 2 where upon heating by the heat source 118, first element 102 comprises first dimension 120 which allows removal of the first element 102 from the assembly. Similarly, see Figures 10 and 11 where upon heating by the heat source 318, first element 302 comprises a first dimension 320 which allows removal of the first element 302 from the assembly. Also similarly, see Figures 15 and 16 where upon heating by the heat source 418, first element 402 comprises a first dimension 420 which allows removal of the first element 402 from the assembly. See also paragraph [0037]-[0038].

The Examiner states that “Claim 15, lines 7 and 8, ‘heating the [first element] from the assembly is a means of de-encrypting the assembly’ is not clear.” Applicants have amended claim 15 thereby rendering the present rejection moot. Support for the amendment can be found specifically in paragraph [0037] as well as elsewhere in the detailed description and original claims. Paragraph [0037] describes the method of the presently claimed invention and a means to disassemble the assembly.

The Examiner states “Claim 28-31, ‘[a] particular manner, location or sequence of heating’ is not clear.” Applicants have canceled claims 29-31 without prejudice to introduction in a subsequent application or reintroduction in the present application. The cancellation of claims 29-31 thereby renders the present rejection moot with respect to claims 29-31. With respect to claim 28, Applicants respectfully direct the Examiner’s attention to paragraph [0042], which describes means for heating the first element. Applicants assert that when claim 28 is read in view of paragraph [0042], the invention as presently claimed in claim 28 is clear.

The Examiner states “Claim 39, ‘a third temperature’ is not clear.” Claim 39 has been amended thereby rendering the present rejection moot. Support for the amendment can be found specifically in paragraph [0039] as well as elsewhere in the detailed description and original claims.

Accordingly, Applicants believe the presently rejected claims satisfy the requirements of 35 U.S.C. § 112, and respectfully request the Examiner withdraw the present rejections.

35 U.S.C. § 102 and Claims 15, 16, 25, and 27-31

The Examiner has rejected claims 15, 16, 25, and 27-31 under 35 U.S.C. § 102(b) as allegedly being anticipated by JP 41-0275545 (hereinafter JP ‘545). Applicants traverse.

Applicants respectfully submit that “a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The Examiner has failed to disclose each and every element set forth in the claims. Claim 15 recites:

15. A method comprising:
 - heating a first element comprising an initial dimension, where the first element is part of an assembly, to a first temperature sufficient to expand the initial dimension to a first dimension, the first dimension greater than the initial dimension; and
 - removing the first element from the assembly
 - wherein the first element can only be removed from the assembly when the first element reaches the first temperature, and wherein heating the first element from the assembly is a means of disassembling the assembly.

In the Office Action of February 7, 2007, the Examiner states:

‘545 discloses: Regarding Claim(s) 15, 25, and 27, a method comprising: heating a first element (22) comprising an initial dimension, where the first element is part of an assembly, to a first temperature sufficient to expand the initial dimension to a first dimension, the first dimension greater than the initial dimension; and removing the first element from the assembly where in the first element can only be removed from the assembly when the first element is at the first temperature, and where the heating the first element from the assembly is a means of de-encrypting the assembly (Fig. 1; Abstract). Examiner sees the first element (22) is removed from the assembly, since it depends on how the removing action is translated. Also the heating the first element from the assembly is considered as a means of de-encrypting the assembly (thermal fuse).³

Applicants respectfully assert that the JP ‘545 elements 22 and 21 can be disassembled without heating the first element of JP ‘545. The structure of JP ‘545 has a first end that is closed where the two mating tips are bonded together and a second end that is open where no part of the two mating tips are present. In the second end, the insulation forms the boundary of the assembly, and is unobstructed from being removed at the second end. The assembly of JP ‘545 can be

³ Office Action, page 3-4.

disassembled by removing the insulating material 22 out of the second end. There is no constraint or limitation that prevents the insulation material from being removed via the open end opposite the bonded mating tips. As a result, the assembly does not require a heat source and specifically heating of the insulating material (the first element) in order to disassemble the JP '545 apparatus. In contrast, the present invention as claimed provides a method where the first element can only be removed from the assembly when the first element reaches the first temperature.

In view of the foregoing, Applicants respectfully assert that claim 15 is not anticipated by JP '545 under § 102(b) and respectfully request that the Examiner withdraw the rejection of claim 15. As claims 16, 25, and 27-31 depend from and further limit claim 15, Applicants respectfully assert that claims 16, 25, and 27-31 are patentable over JP '545 and respectfully request that the Examiner withdraw the rejections of 16, 25, and 27-31.

35 U.S.C. § 103 and Claims 20-23 and 32-34

The Examiner has rejected claims 20-23 and 32-34 under 35 U.S.C. § 103(a) as allegedly being unpatentable over JP '545. Applicants traverse.

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). JP '545 does not teach or suggest all the limitations of claim 15. As previously set forth, the first element in JP'545 may be removed through the second end which is unobstructed from mating tips. There is no requirement that the assembly of JP '545 be heated to reach any temperature in order to be removed, when the assembly can be disassembled at any temperature. As previously set forth, the present invention as claimed provides a method where the first element can only be removed from the assembly when the first element reaches the first

temperature. Accordingly, the teachings of JP '545 are insufficient to render claim 15 *prima facie* obvious under 35 U.S.C. § 103(a).

In view of the foregoing, Applicants respectfully assert that claim 15 is patentable over JP '545 under § 103(a). As claims 20-23 and 32-34 depend from and further limit claim 15, Applicants respectfully assert that claims 20-23 and 32-34 are patentable over JP '545 and respectfully request that the Examiner withdraw the rejections of claims 20-23 and 32-34.

Claims 38-39

Applicants believe that claims 38-39 contain allowable subject matter. Applicants note that the Examiner has not provided a rejection of claims 38-39 in view of any prior art. Applicants respectfully request that claims be indicated as allowed. JP '545 does not disclose a preliminary step to create the assembly by heating the first element.

New Claims 40-45

Applicants have added new claims 40-45. Applicants respectfully assert that claims 40-45 are in condition for immediate allowance. JP '545 does not disclose or teach a method comprising an assembly comprised of two metal elements, as found in claim 40. Further, JP '545 does not disclose or teach a method where the dimension that is expanded is a diameter of a circle, as found in claim 42. Additionally, JP '545 does not disclose or teach a method that upon heating the first element to a first temperature allows removal of the first element from the assembly thereby disassembling the assembly or coupling of the first element and the second element thereby creating an assembly, as found in claim 43.

CONCLUSION

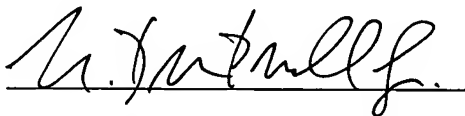
With the above amendments and remarks, Applicants believe that all objections and/or rejections have been obviated. Thus, each of the claims remaining in the application is in condition for immediate allowance. A passage of the instant invention to allowance is earnestly solicited.

Applicants believe that no additional fee is necessary; however, should a fee be deemed to be necessary, the Commissioner is hereby authorized to charge any fees required by this action or any future action to Deposit Account No. 16-1435.

Should the Examiner have any questions relating to the instant application, the Examiner is invited to telephone the Dean Powell at (336) 607-7347 or Ben Schroeder at (336) 607-7486 to discuss any issues.

Respectfully submitted,

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